

## REMARKS

### Status of Claims

Claims 1, 3, 5-10, 12-14, 16-21 and 23-26 are pending, of which claims 1, 9 and 23 are independent.

Claims 1, 9 and 23 have been amended to correct informalities in the claim language and to more clearly define the present subject matter. Care has been taken to avoid introducing new matter.

### Rejection under 35 U.S.C. §§ 102/103

Claims 1, 3, 5-10, 12-14, 16-17 and 24-25 were rejected under 35 U.S.C. § 102(b) as being anticipated by Bertram et al. (US 2003/0042850). This rejection is traversed for at least the following reasons.

Applicants respectfully submit that, at a minimum, none of the cited references discloses or suggests that "*at least one part of a surface of the inorganic phosphor layer is covered with an organic material which is a conductive organic material*" as recited by amended claims 1, 9 and 23. The Examiner asserts that paragraphs [0023], [0025], [0026] and [0029] of Bertram disclose the claimed organic material. However, Bertram fails to disclose that the alleged organic material is a conductive organic material. As such, it is clear that, at a minimum, Bertram fails to disclose the above identified feature of amended claims 1, 9 and 23.

Further, Applicants submit that Bertram fails to disclose the use of "*an oxide or a composite oxide including at least one kind of element selected from a group of Zn, Ga, In, Sn and Ti,*" as recited by claims 1, 9 and 23. In this regard the Examiner asserts that Bertram inherently discloses the oxides of II-IV semiconductor material. This assertion fails for at least

the following reasons. First, one of skill in the art would recognize a II-VI semiconductor material includes an oxide. Second, although US 2004/0036130 appears to disclose ZnO as a II-VI semiconductor material, it does not necessarily mean that Bertram inherently discloses oxides as a II-VI semiconductor material. Bertram discloses that “[m]ost likely the quantum dots comprise InN, InGaP or GaAs. The radii of the quantum dots are smaller than the exciton Bohr radius of the respective bulk material. Most likely the quantum dots have radii no larger than about 10 nm. It is most preferable that the quantum dots have radii between 1 and 6 nm” (see, paragraph [0021] of Bertram). It should be noted that InN, InGaP and GaAs are a high electric resistance material. In contrast, oxides or compound oxides of Zn, Ga, In, Sn or Ti (e.g. ZnO or TiO<sub>2</sub>) are known to be low resistance material. Thus, it is clear that Bertram does not inherently disclose oxides as a II-VI semiconductor material because Bertram would not utilize such low resistant materials (see, page 16, lines 17-19 of the specification) for the quantum dots. As such it is clear that Bertram fails to disclose the use of “*an oxide or a composite oxide including at least one kind of element selected from a group of Zn, Ga, In, Sn and Ti,*” as recited by claims 1, 9 and 23.

Based on the foregoing, Applicants respectfully submit that claims 1, 9 and 23 and all claims dependent thereon are patentable over the cited reference. Thus, Applicants respectfully request that the Examiner withdraw the rejection of claims 1, 3, 5-10, 12-14, 16-17 and 24-25 under 35 U.S.C. § 102.

#### **Rejections under 35 U.S.C. §103**

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bertram et al. as applied to claim 1, and further in view of Watanabe et al. (US 2002/0015859). Claims 19-21,

23 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bertram et al. in view of Koyama (US 2004/0207578). These rejections are traversed for at least the following reasons.

First, Applicants respectfully submit that the earliest U.S. publication date of Koyama is December 10, 2003, while the present application claims the foreign priority under 35 U.S.C. § 119 of Japanese Patent Application Numbers 2003-190446 filed on July 2, 2003 and 2003-190449 filed on July 2, 2003. Applicants are submitting the certified English translation of the Japanese Patent Application Numbers 2003-190446 and 2003-190449 herewith for Examiner's review to perfect the claim to priority back to July 2, 2003. In view of that priority date, Koyama is not an appropriate prior reference under 35 U.S.C. § 103(a).

Second, Applicants incorporate herein the arguments previously advanced in traversal of the rejection under 35 U.S.C. § 102(b) predicated upon Bertram. The additional cited Watanabe reference does not teach or suggest the above discussed features of claims 1, 9 and 23. Therefore, any combination of the cited references would still fail to disclose the claimed features, and it would not have been obvious to add these features to such a combination.

Based on the foregoing, Applicants respectfully submit that claims 18-21, 23 and 26 are patentable over the cited references. Thus, Applicants respectfully request that the Examiner withdraw the rejection of claims 18-21, 23 and 26 under 35 U.S.C. § 103(a).

**CONCLUSION**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Takashi Saito  
Limited Recognition No. L0123

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 TS:MaM  
Facsimile: 202.756.8087  
**Date: March 15, 2010**

**Please recognize our Customer No. 53080  
as our correspondence address.**